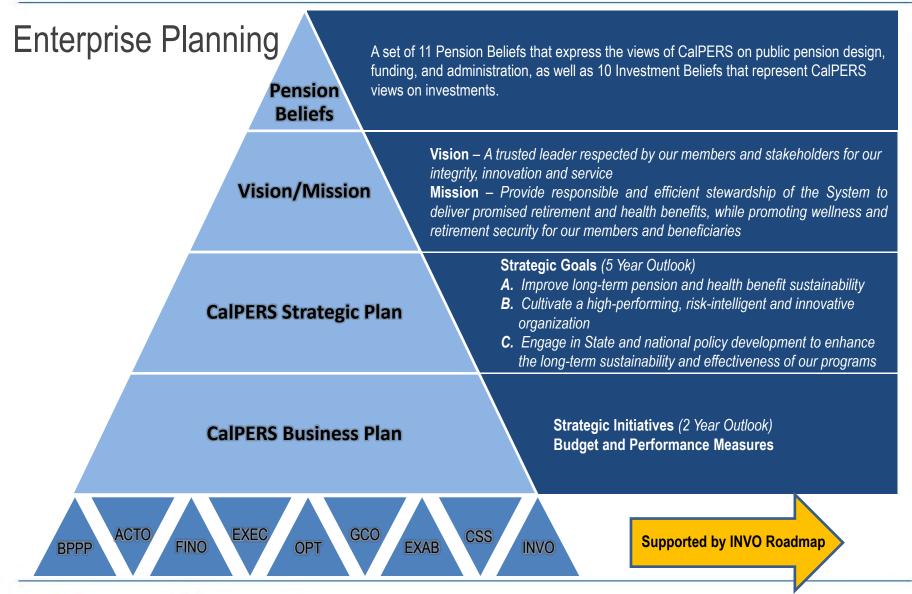




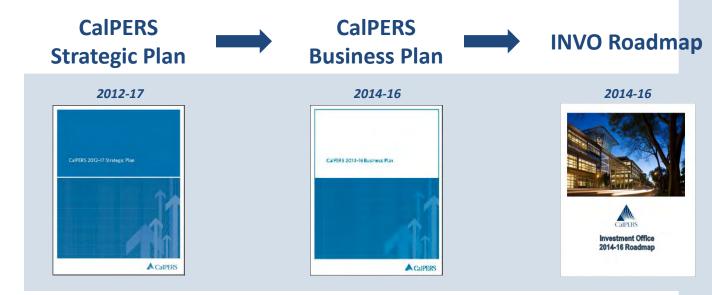
# Agenda

- Communicate the Investment Office's (INVO) alignment with CalPERS Strategic Plan
- Provide an update on INVO Roadmap accomplishments & current efforts
- Highlight the ongoing Target Operating Model (TOM) Refresh & related activities
- Preview upcoming 2015-2017 plans & goals





## INVO Alignment with Enterprise



#### **CalPERS Enterprise Mission**

Provide responsible and efficient stewardship of the System to deliver promised retirement and health benefits, while promoting wellness and retirement security for members and beneficiaries.

#### **Investment Office Mission**

Manage the CalPERS investment portfolio in a cost effective, transparent and risk-aware manner in order to generate returns to pay benefits.

### INVO Roadmap: Evolution and Current Outlook

Pre-2008

• Significant and poorly understood operational & investment risks in several programs

2008 - 2010

Triage

2010 - 2012

• Establish Foundation – INVO Roadmap & Target Operating Model (TOM)

2012 - 2016

- Heavy Lifting Phase Complete key Roadmap projects
- Establish a sustainable organization build repeatable processes, controls & develop a deep bench of people

2014 – Forward "Continuous Improvement"

- Refine our Strategic Priorities to address new challenges and meet our return, risk, & cost objectives
- Continue to enhance processes, controls & systems on an ongoing basis
- Develop Operational Health Metrics for investment functions
- Launch TOM Refresh & Risk Assessment (Risk Assessment phase to be completed by December 2014)
- Integrate the Investment Beliefs into our investment decision making

# Original INVO From – To (circa 2009)

Today (FROM)	Vision (TO)	
Long-term, static asset allocation framework	More dynamic framework, responsive to market conditions	
Risks not transparent & understood	Key risks understood & managed	N.
Tactical, asset class-based approaches to building strengths & competencies	Clear sense of our strengths & competencies we want to develop  Gans	drove
Bottom up approach to value creation	Integrated strategies for value creation that blend cross-asset class approaches Road	l lmap
Lack of common systems, processes & analytics	Clear target operating model – strong operational data, governance, systems & controls	tives
Inconsistent culture & employee experience	High performance culture & quality employee experience	
Inadequate reporting systems & data for effective cost management	Automated expense tracking & reporting systems, & improved cost effectiveness	



# 2014-16 INVO Roadmap Strategic Objectives

- Investment Performance
- Asset Allocation
- Investment Risk Management
- ESG Investment Strategy
- Emerging Manager Programs
- Organization, Systems, & Controls
- Cost Effectiveness
- Talent Management

Objectives helped drive the development of the Target Operating Model

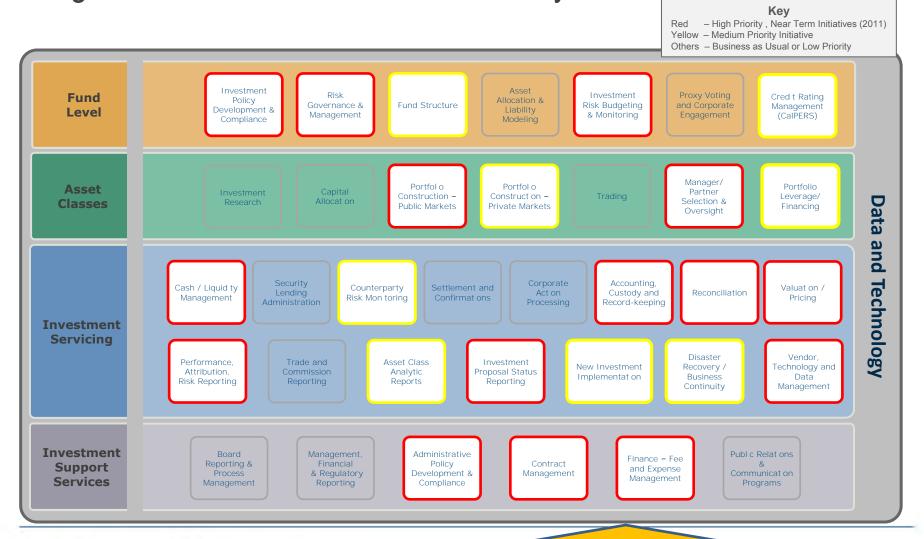


## What is a Target Operating Model (TOM)?

TOM = People, Process, Technology & Data								
What functions does/should the Investment Office perform?	■ Functions / Activities							
What tools and information do people need to accomplish tasks?	<ul><li>Technology</li><li>Data</li></ul>							
How do people complete tasks?	<ul><li>Processes</li><li>Control Points</li></ul>							
How are people organized and how do they interact?	Organization Model							
Who does the work? What expertise?	<ul> <li>Roles/Responsibilities</li> <li>Insourced / Outsourced Providers</li> <li>Skills / Knowledge Required</li> </ul>							

In summary, the People, Process, Technology and Data needed to effectively manage the CalPERS Investment portfolio.

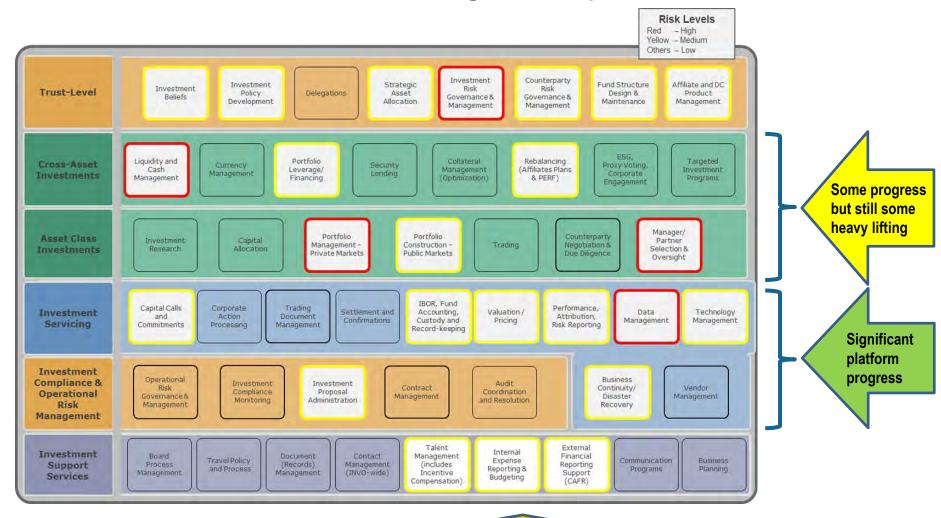
Original INVO TOM & Risk Levels - Key Focus Areas in 2010





- 35 functions identified in 2010
- 15 high risk, ≈ 43%

# Current TOM & Risk Levels- Progress Report since TOM Refresh

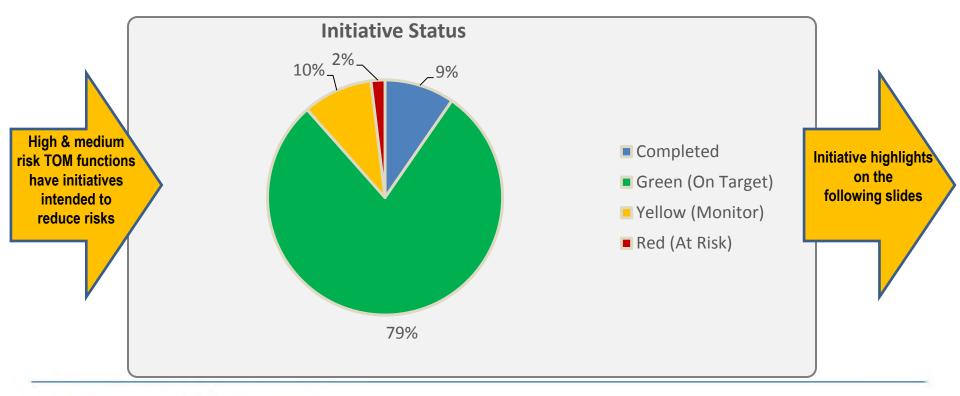




- 48 discrete functions
- 5 high risk, ≈ 10%

### Status of Roadmap Initiatives

- The INVO Roadmap Initiatives consist of 52 active projects related to our Strategic Objectives. 26 of these projects are focused specifically on enhancements to the Target Operating Model.
- Currently 87% of initiatives are completed and/or on target, in terms of budget, timeline & objectives.
- The INVO Operating Committee uses a formal process to communicate, monitor, & decide on the status and completion of the TOM initiatives.



### Ongoing Heavy Lifting – Yellow & Red Status

### **INVO Roadmap**

- ✓ INVO Classification Study & Organization Redesign Project Red Status is due to completion date much farther out than anticipated, due to a prolonged review period within CalHR. Some recent progress on elements of the study. (Primary ownership rests with HRSD)
- ✓ Executive Compensation Policy Review Project Yellow Status is due to the extended anticipated completion date from FY 2015/16 to FY 2016/17. Now underway. (Primary ownership rests with HRSD)
- Trust Level Risk Management Yellow Status is due to required data movement needs, restructuring of the ISG, and difficulty recruiting.
- ✓ Sustainable Investments Research Initiative (Phase 2) Yellow Status due to delays in recruiting for Investment Officer III Team Lead, Sustainable Investment.
- ✓ Contract Oversight Unit Integration Yellow Status is due to an extended timeline, resulting from staff reprioritization to address multiple CalPERS Board of Administration Consultant RFP contracts.

#### **TOM Initiatives**

- ✓ Performance Measurement & Attribution (TOM #11) Yellow Status is due to resource constraints, and extension of timeline on Fixed Income deployment.
- ✓ INVO Expense Management & CAFR Support (TOM #3) Yellow Status is due to significant work still remaining versus available resources in the accounting policies & procedures associated with allocation of Administrative Expenses. (Partnership with FINO)



### Recent Accomplishments

### **INVO** Roadmap

- ✓ Investment Performance Implemented a systematic process to provide standardized analysis of quarter by quarter change in Net Asset Value (NAV) within the Investment Management Group in Private Equity. Exited 10 tail-end funds in Private Equity.
- ✓ Investment Performance Obtained Board approval of new policy portfolios for affiliate funds JRS, JRSII, LES, & CERBT.
- ✓ Cost Effectiveness Updated FY 2013-14 cost savings to \$57.6 million (full update to the IC in April 2015).
- ✓ Talent Management Formed an INVO Diversity & Inclusion Task Force to assess current state and identify and prioritize initiatives.
- ✓ **ESG** Refreshed Financial Markets Principles and Financial Markets Priorities; presented to the Investment Committee in September 2014.
- ✓ Investment Beliefs Developed Annual Program Review Template and Talent Management-related recommendations; presented to the Investment Committee in August 2014.

#### **TOM Initiatives**

- ✓ PM2 "Public Markets Portfolio Management" (TOM #1) Implemented an Internal Equity Investment Book of Record service & Charles River Portfolio Construction functions.
- ✓ Strategic Asset Allocation Progressed in implementing an integrated Asset Liability Management process & extending it to all investment trusts.
- ✓ Performance Measurement and Attribution (TOM #11) Revised Board reports to improve information delivery, established program reviews, further integrated total fund & asset class performance & risk reports into the ISG committee.



## **Upcoming Efforts**

#### **INVO** Roadmap

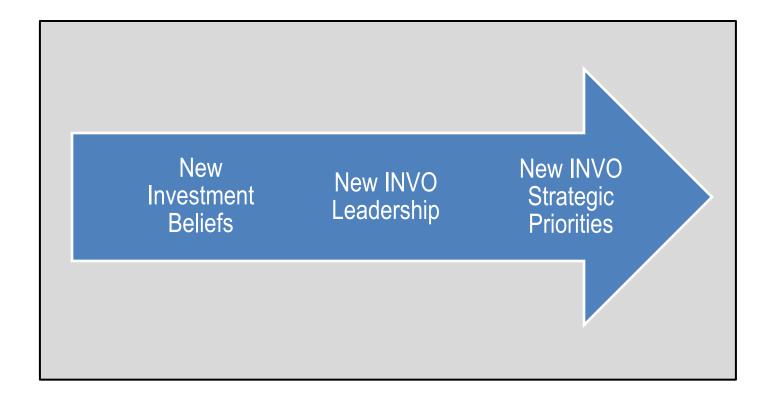
- ✓ Risk Management Deliver presentation to the Investment Committee in Feb 2015 explaining counterparty risk monitoring & value at risk calculation
- ✓ Investment Performance Simplify the Global Equity portfolio by reconstituting the CalPERS Focus List
- ✓ Investment Beliefs Initiate review of best practices for Real Assets partner contracts to align with Investment Belief #8
- ✓ Investment Performance Complete the wind-down of the ARS program by the end of December 2015

#### **TOM Initiatives**

- ✓ PEARS (TOM #2) Complete verification of historical data, validate successful data conversion & perform user acceptance testing & parallel monitoring of Release 1, which replaces PrivateEdge
- ✓ Manager Selection & Monitoring (Phase 2) (TOM# 8) Complete assessment of current state, refresh guidelines & integrate independent oversight function into Investment Compliance & Operational Risk (ICOR) function
- ✓ Performance Measurement & Attribution (TOM #11) Deploy Global Fixed Income Program Review to production, complete gap analysis related to Global Investment Performance Standards (GIPS) in preparation to adopt industry standard for calculating & presenting investment performance
- ✓ Affiliate Investment Program Process & Technology (TOM # 24) Complete core software development work, implementing data exchange with partner organizations, configuring the production infrastructure, & conducting testing/parallel processing to confirm proper function to support Affiliate Trusts



# Preview of 2015-2017 INVO Strategic Plans







# What Do We Want to Keep?

- Focus on returns, risks, & costs as key measures
- TOM Architecture & disciplined administration of projects and initiatives (Roadmap)
- Steady progress on heavy lifting & continuous improvement efforts within INVO
- Focused governance, transparency, & alignment of interests
- Talent Management recruiting, training, & compensation
- Communication, governance & sharing status and progress across groups
- Asset Liability Management as key asset allocation decision making process
- Asset class expertise & execution

### What Do We Want to Change?

- Carefully examine our portfolio & operations to ensure all programs are repeatable, predictable and scalable
- Consistently measure & report on performance, risk, & cost as well as our "business operations" & efficiency
- Better understand & align risks with research & investment convictions, improve capital allocation process
- Improve collaboration & decision making at the total fund level
- Simplify & focus our initiatives and related communications
- Better relationship & alignment with the goals of the broader organization
- Balance bureaucracy with need for efficiency
- Better measure & monitor ongoing work & responsibilities

### **New INVO Mission and Vision Statements**

### **INVO Mission Statement**

• Manage the CalPERS investment portfolio in a cost effective, transparent and risk-aware manner in order to generate returns to pay benefits.

### **INVO Vision Statement**

- The Investment Beliefs and CalPERS Core Values are the guiding principles underlying our investment decisions.
- We operate with a focus on repeatable, predictable, and scalable portfolios and practices.
- We seek alignment of interests with our primary stakeholders, our business partners and ourselves.
- We use clearly articulated performance, risk, and cost metrics to evaluate our value-add to the funds.
- Our investment and business activities are supported by a solid platform of effective risk management and controls.

## Next Steps

- Continue "Heavy Lifting" on ongoing TOM initiatives
- Complete Risk Assessment and Refresh of the Target Operating Model (TOM), develop Operational Health metrics for investment functions
- Implement changes to internal INVO governance to improve trust-level
   Investment Decision Making
- Develop a new Roadmap that reflects new Strategic Priorities and addresses findings from the TOM Refresh

### Recap

- We have made significant progress, particularly in operations, systems, & controls
- There is still a fair amount of heavy lifting to do, particularly in building out our trust-level investment decision making process
- We are seeking to better incorporate core workload and management reporting within the INVO Roadmap
- Our vision is to focus on strategies & operations that are <u>repeatable</u>,
   <u>predictable</u>, & <u>scalable</u>

### **APPENDIX**

### TOM Initiatives – Status and Look Ahead for 2014-16

Business Initiative		Status	2013			2014				2015				20	16	
			2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	
ID		,		_												
1	PM2: "Public Markets Portfolio Management"	Completed														
2	PE Portfolio Management, Accounting & Data Services (PEARS)	G ↔							1							
3	INVO Expense Management & CAFR Support	γ ↔														
4	Derivatives Central Clearing & Processing	Completed														
5	Contract Management – INVO Workflow Management	Completed					13									
10	Trust (Fund) Structure Validation & Redesign	G↔														
11	Performance Measurement & Attribution	γ ↔														
21	Incentive Compensation Reengineering (INVO)	γ ↔							3						_	
12	Pricing / Valuation (INVO)	GΥ														11 12 10 10 10 10 10
25	Affiliate Investment Program - Roles & Responsibilities	Completed														→ Status trend unchanged
24	Affiliate Investment Program - Process & Technology	G↔									Added					unchanged
6	Investment Compliance Monitoring	Completed													1	Status trend declining
23	Investment Proposal Administration Enhancements	Completed														
7	Travel Policies & Procedures	Completed													1	Status trend improvi
9	Operational Risk Governance & Management	Completed														
8	Manager Selection & Monitoring – Standards and Compliance	G↑				Con	pleted :S	election F	hase							Status
26	Operational Delegation of Authority (Non-investment related)	Completed														G = On Target
15	Vendor Management	Completed														Y = Monitor
14	Technology Management	G↔														C. SEARCH
20	ARS Legal Structure & Technology	Cancelled														R = At Risk
13	Cash Management - Processing & Controls (INVO)	G↔														Level of Effort
19	Investment Policy Revisions	G↑														
22	Disaster Recovery / Business Continuity	G ↔														Significant
18	Contact & Relationship Data Mgt - Current Business Partners	Defer								Re-ev	aluate					Moderate
17	Data Management - Core Capabilities	G↔				Defer									_	
16	Records Retention, Document Management	Defer				0				Re-ev	aluate					

